



HR CoaXPress

hr51MCX

General

Model	hr51MCX
Product code	F004102
Product series	HR CoaXPress
Status	Available

Sensor

Sensor type	Area scan
Chroma	Mono
Spectrum	Visible
Spectral range	400 nm to 1000 nm
Resolution	8,416 × 6,032 (51.00 MP)
Sensor model	Gpixel GMAX4651
Sensor architecture (material)	cmos
Shutter type(s)	Global shutter (GS)
Sensor size	38.71 × 27.75 mm (47.63 mm, 35mm Full Frame)
Pixel size	4.60 μm × 4.60 μm

Pixel formats

Sensor bit depth	12-bit, 8-bit
Monochrome pixel formats	mono12, mono8

Imaging performance

Dynamic range	65 dB
SNR	42.6 dB

Timing and gain

Max. frame rate	30 fps
Exposure time	16 μ s to 60 s
Gain	0.0 dB to 40.0 dB

I/Os and power

Non-isolated lines	0 x LVDS input, 0 x LVDS output, 0 x TTL input, 0 x TTL output, 2 x 24V input, 4 x Open drain output,
Specific non-isolated lines	1 x RS232 input, 1 x RS232 output, 0 x RS422 input, 0 x RS422 output,
Opto-isolated lines	1 x Optical isolated input, 0 x Optical isolated input,
Power supply	10 to 25VDC, Power over CoaXPress
Power consumption	External: 13 W (typical)

Mechanical properties

Body dimensions (L x W x H in mm)	76 x 70 x 70
Filter/protection glass	N-BK7 - AR coating 380-850nm
IP class	IP30
Lens mount(s)	M58x0.75
Weight	380 g

On-board memory and FPGA

Non-volatile memory (Flash)	160 MByte
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Interfaces

Digital interface	cxp-6 with 4 connections
Interface connector	(Din1.0/2.3)

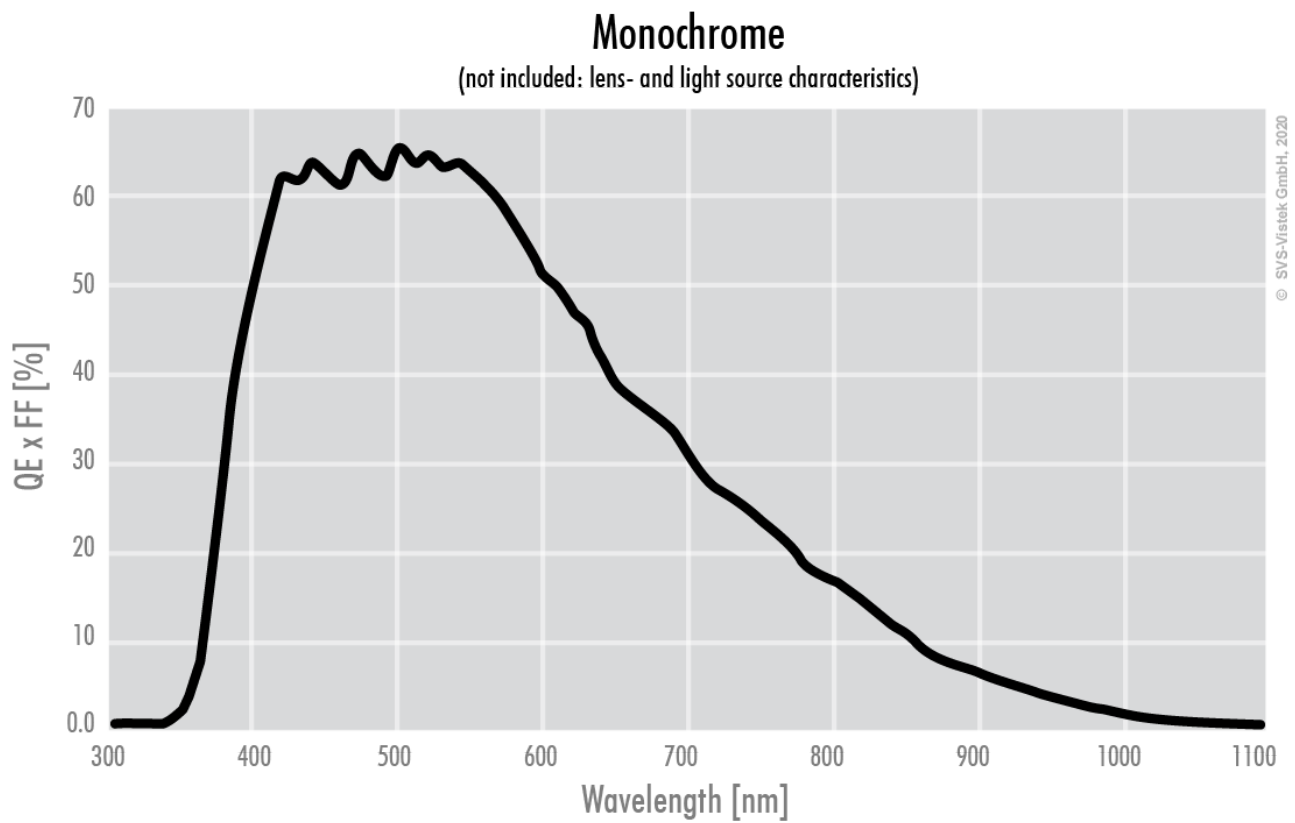
FW features - image control

Exposure modes	auto, manual
Gain modes	auto, manual
Image control features	dpc, ffc, lut, mirror-image, roi, shading-correction

FW features - camera control

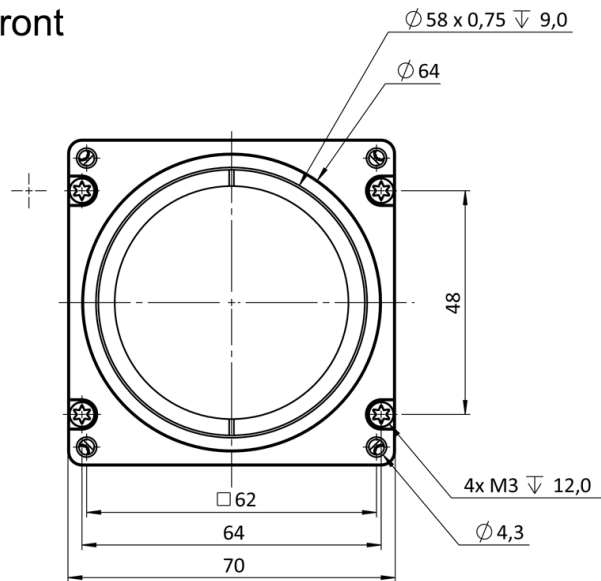
Trigger modes/sync	external, internal, software
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Quantum Efficiency

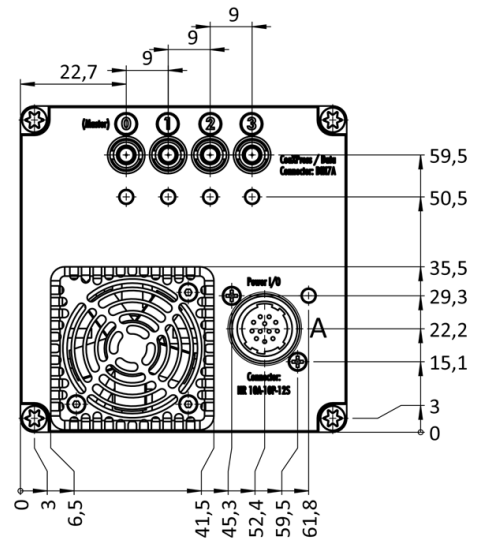


Technical Drawing

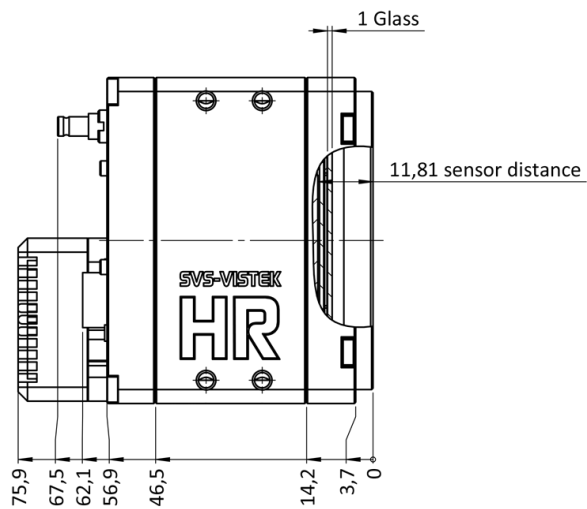
front



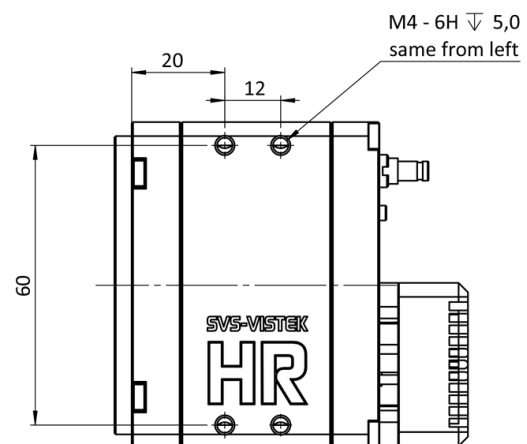
back



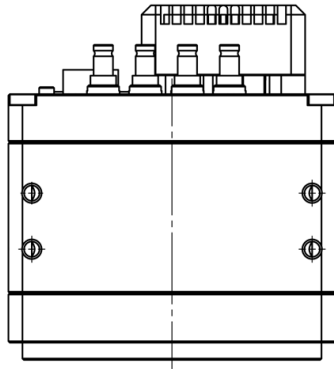
cross section



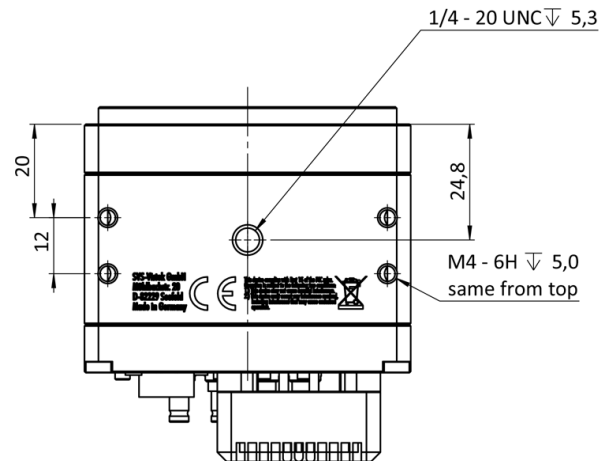
right side



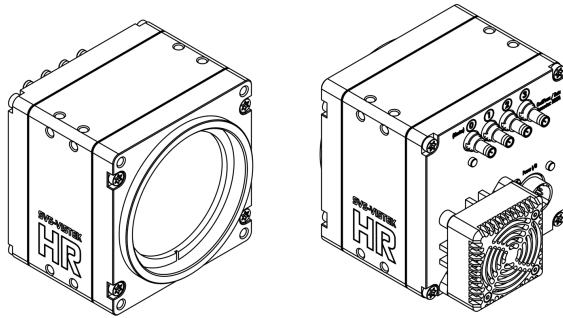
top



bottom



3D



I/O pin assignment



1	VIN -	(GND)	7	OUT 1	(open drain)
2	VIN +	(10 V to 25 V DC)	8	OUT 2	(open drain)
3	IN 4	(RXD RS232)	9	IN 3 +	(opto In +)
4	OUT 4	(TXD RS232)	10	IN 3 -	(opto In -)
5	IN 1	(0-24V)	11	OUT 3	(open drain)
6	IN 2	(0-24V)	12	OUT 0	(open drain)